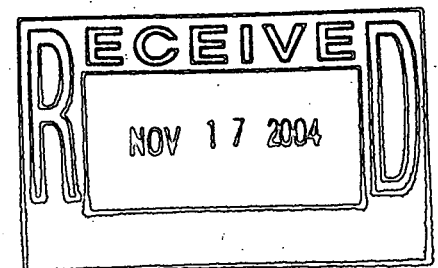


**Final Project Closeout Report  
For  
Building 903 Decontamination Pad Cluster**

**Revision: 1**

**November 2004**

**Remediation, Industrial D&D, and Site Services  
Kaiser-Hill Company, LLC**



Review for Classification *UCR*  
Name: *CJ Ferguson - dnr*  
Date: *11/17/04*

**ADMIN RECORD**

## Table of Contents

<b>I.</b>	<b>Introduction</b>	<b>1</b>
<b>II.</b>	<b>Action Description</b>	<b>2</b>
<b>III.</b>	<b>Verification that Action Goals Were Met</b>	<b>2</b>
<b>IV.</b>	<b>Verification of Treatment Process</b>	<b>2</b>
<b>V.</b>	<b>Radiological Analysis</b>	<b>3</b>
<b>VI.</b>	<b>Demolition Survey Results</b>	<b>3</b>
<b>VII.</b>	<b>Waste Stream Disposition</b>	<b>3</b>
<b>VIII.</b>	<b>Deviation from Decision Document</b>	<b>4</b>
<b>IX.</b>	<b>Description of Site Condition at End of Decommissioning</b>	<b>4</b>
<b>X.</b>	<b>Demarcation of Excavation</b>	<b>4</b>
<b>XI.</b>	<b>Demarcation of Wastes Left in Place</b>	<b>4</b>
<b>XII.</b>	<b>Dates and Duration of Specific Activities</b>	<b>4</b>
<b>XIII.</b>	<b>Final Disposition of Waste</b>	<b>4</b>
<b>XIV.</b>	<b>Next Steps for Area</b>	<b>4</b>

## Appendices

1. Maps
2. Contact Records
3. PDSR
4. CDPHE RSOP Notification Concurrence
5. RCRA Closure Summary for Interim Status Unit 18.01

## **I. Introduction**

Building 903 Decontamination Pad Cluster was located on the south half of the Rocky Flats Environmental Technology Site (RFETS), just west of the 903 Pad (see RFETS Plot Plan, Appendix 1). The 903B Cluster consists of Building 903B, an approximately 2,800 square-foot liquid waste management building constructed in 1995; Building 903A the Main Decontamination Facility constructed in 1993 (closed under a RCRA Closure Description Document); and Building 903A2 a 100 square-foot general storage shed acquired in 1993. The closure of 903B and 903A2 was completed in accordance with the Rocky Flats Cleanup Agreement (1996), and the Rocky Flats Cleanup Agreement Standard Operating Protocol (RSOP) for Facility Disposition. This document summarizes the actions taken and the final condition of the Building 903 Decontamination Pad Cluster.

### **903 Decontamination Pad Cluster Description**

Building 903A was a 1,400 square-foot equipment decontamination facility constructed in 1993. The facility had a concrete pad with a sump located in the center, a metal roof, and a single metal wall on the west side of the pad. The pad was sloped and curbed to contain the decontamination water and sediment.

Building 903A was the Site's main decontamination facility for ER activities and was used to decontaminate field equipment. Decontamination fluids were collected by the sump in the center of the pad and transferred to 903B where the solids would be removed.

Building 903B was the Environmental Liquids Management Area for the Decontamination Pad. Wastewater was pumped from the Decontamination Pad to a series of funnel shaped separators where the solids were settled out of the wastewater and collected in 55-gallon drums. These drums were then sampled and appropriately disposed of. The final wastewater was trucked to the Building 891 water treatment facility for final treatment. Historically, only trace amounts of radioactive material and RCRA contaminants were found in the wastewater and sediment generated by the Decontamination Pad.

Building 903B was an approximately 2,800 square-foot liquid waste management building constructed in 1995. This facility had a concrete bermed floor and a collection sump in the middle of the building. This building was a steel frame building constructed on a concrete foundation. The walls and roof are insulated corrugated metal. The building is configured with a large highbay area that houses the water treatment equipment.

Building 903A2 was a 100 square-foot general storage shed acquired in 1993. This structure was a wood building with wood walls, wood floor and an asphalt shingle roof. This building sat on a concrete pad and was located west of the 903A Main Decontamination Facility (MDF).

Buildings in the 903 Decontamination Pad Cluster had the following utilities: electric, domestic water provided by a fire hydrant located due west of the MDF and due south of Building 906 (this hydrant is not part of the Building 903 footprint, but is for Building 906 fire protection), and wall-mounted fire extinguishers for fire protection.

## II. Action Description

An RLCR was not performed for this facility. Instead a RFCA Contact Record was written (*Building 903AB and 903B Reconnaissance Level Characterization*, dated 6/30/04), that discusses the process history of the facility. Based on the process history, the facility was classified as a Type 2 RFCA facility and recorded as such in the Contact Record. The PDS was conducted pursuant to the Decontamination and Decommissioning Characterization Protocol (MAN-077-DDCP) and the Pre-Demolition Survey Plan for D&D Facilities (MAN-127-PDSP). The PDS was built upon physical, chemical and radiological hazards identified in the facility-specific Historical Site Assessment Report for Buildings 903A, 903B, and 903A2, dated December 2002, Revision 0.

The basic deactivation strategy was to remove all excess material/equipment left in the facility.

RCRA regulated items (including light bulbs, circuit boards, and oils, if any) were removed and dispositioned in accordance with state, federal, and site requirements. RCRA Closure was conducted for the Interim Status Unit 18.01/MDF (see Appendix 5 for description of RCRA closure activities). Building 903 Decontamination Pad Cluster did not contain any asbestos material.

The 903A, 903B, and 903A2 building structures and foundations were removed entirely and dispositioned off-site at the appropriate disposal site (see Section VII). In addition, two other support structures (903A1 and 903A3) were released under a Waste Release Evaluation (040812-T130I-001) and demolished with the 903 Decontamination Pad Facility.

## III. Verification Action Goals Were Met

Four action objectives were established for Building 903 Decontamination Pad Cluster removal project prior to beginning demolition:

- *Decontamination of the facility (as necessary) to support release for decommissioning per site approved procedures.*

The facilities met free-release standards and the demolition waste was placed in an off-site landfill.

- *Decommissioning of the Building 903 Decontamination Pad Cluster facilities in accordance with RFCA and applicable or relevant and appropriate requirements.*

RFCA and other relevant requirements were complied with throughout the project. Consultations with the LRA were conducted throughout the project.

- *Complete decontamination and decommissioning activities in a manner that is protective of site workers, the public and the environment.*

Decontamination and decommissioning activities were completed within regulatory requirements. No injuries or releases to the environment occurred during the project.

- *Demolish the 903 Decontamination Pad Cluster facility structures and utilities to 3' below grade.*

All of the 903 Decontamination Pad Cluster facility structures and concrete foundations were removed during demolition. All foundations and utilities specific to the cluster were removed.

#### IV. Verification of Treatment Process

This section is not applicable to this project.

#### V. Radiological Analysis

See the Pre-Demolition Survey Report (PDSR) for Building 903 Decontamination Pad Cluster.

#### VI. Demolition Survey Results

This section is not applicable to this project.

#### VII. Waste Stream Disposition

Building 903 Decontamination Pad Closure Project generated the following waste types including sanitary. Listed below is the quantity and disposal site for this waste type and material:

<b><u>Sanitary Disposal</u></b>	Facility debris (9/8/04 through 9/21/04)
<b>Disposal Site:</b>	BFI 93 Landfill, Golden CO
<b>Waste Volume:</b>	1120 cubic yards
<b>Waste Weight (tons):</b>	543.9 tons
<b>Additional Information:</b>	25 shipments – concrete, metal and wood
<b><u>Hazardous Disposal</u></b>	Minor amounts of fluorescent lights, mercury vapor lights, circuit boards, and mercury switches were transferred to an on-site RFCA storage unit, and two 55-gallon drums of curtains.
<b>Disposal Site:</b>	Disposal at the appropriate disposal facility.
<b>Waste Volume:</b>	4.40 m <sup>3</sup> or approximately 763 pounds
<b>Additional Information:</b>	
<b><u>TSCA Waste Disposal</u></b>	NA
<b>Disposal Site:</b>	
<b>Waste Volume (m<sup>3</sup>):</b>	
<b>Additional Information:</b>	
<b><u>Asbestos Waste Disposal</u></b>	NA
<b>Disposal Site:</b>	
<b>Waste Volume (m<sup>3</sup>):</b>	
<b>Additional Information:</b>	
<b><u>Low-Level Waste Disposal</u></b>	NA
<b>Disposal Site:</b>	
<b>Waste Volume:</b>	
<b>Additional Information:</b>	
<b><u>Low-Level Mixed Waste Disposal</u></b>	NA
<b>Disposal Site:</b>	
<b>Waste Volume:</b>	
<b>Additional Information:</b>	

Recycled Material

NA

Recycle Facility:

Waste Volume:

Additional Information:

### VIII. Deviations From the Decision Document

There were no deviations to the decision documents.

### IX. Descriptions of Site Condition at End of Decommissioning

The 903 Decontamination Pad Cluster was demolished, removing all building structures and foundations. Utilities were removed to 3' below final grade. The utilities were disconnected as follows:

- Electrical underground services and 13.8 kV overhead lines were completely removed. The underground conduit that is 3' below final grade was left in place.

Locations of all disconnects are annotated on map in Appendix 1.

The site has been leveled and covered with coconut mat until reseeded in the future.

### X. Demarcation of Excavation

This section is not applicable.

### XI. Demarcation of Wastes Left in Place

No waste materials were left in place.

### XII. Dates and Duration of Specific Activities

<u>Activity</u>	<u>Responsible Contractor</u>	<u>Dates</u>
PDS	Kaiser-Hill	August 2004
Demolition Activities	Kaiser-Hill	September 2004

### XIII. Final Disposition of Wastes

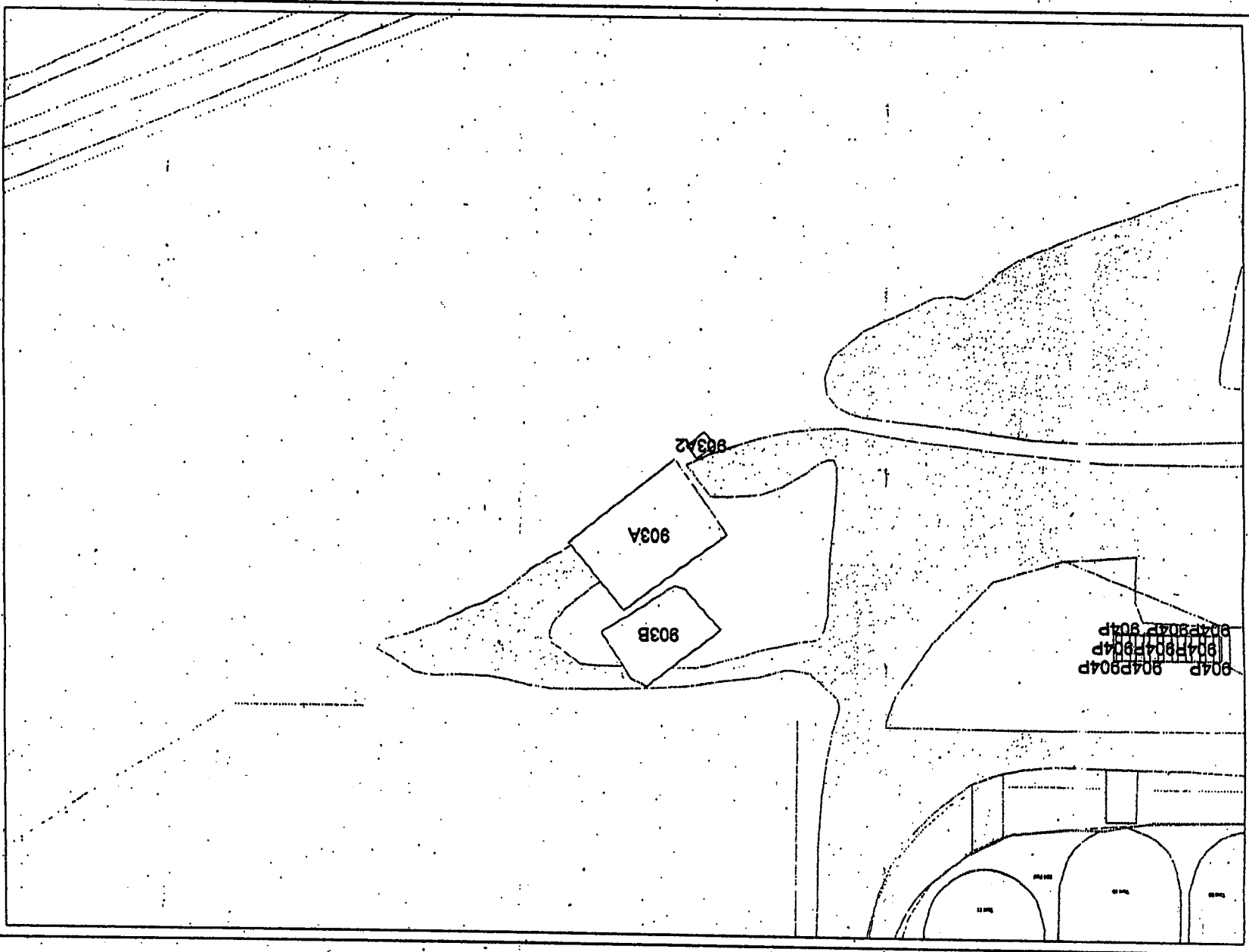
See Section VII.

### XIV. Next Steps for the Area

The site was turned over to ER for final grading and re-vegetation.

## Appendix 1

### Maps





13.8 kV Overhead Removed

904P 904P904P  
904P904P904P  
904P904P 904P

903B

903A











903A2

Underground Service Removed

Rocky Plate Environmental Technology Site

# 903A and 903B Location Map

## Map Features

-  Buildings Remaining
-  D&D Facility
-  Paved Roads
-  Dirt Roads
-  Lakes
-  Fence Removed
-  Fence Remaining
-  Streams
-  Railroad Removed
-  Railroad Remaining



1234  
1 inch equals 22 feet

State Plane Coordinate Projection  
Colorado Central Zone (5470)  
Datum: NAD83

U.S. Department of Energy  
Rocky Plate Environmental Technology Site

Prepared by  
 CH2M HILL

Produced for  
518 Dept. (202) 885-7707  


**Appendix 2**  
**Contacts Records**

# **ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE REGULATORY CONTACT RECORD**

---

**Date/Time:** 9/16/04 - 1330  
**Site Contact(s):** Duane Parsons (RISS) - (DAP-026)  
**Phone:** (303) 966-6458  
**Regulatory Contact:** David Kruchek, CDPHE  
**Phone:** (303) 692-3328  
**Agency:** CDPHE

---

**Purpose of Contact:** Building 903B PDSR Approval

---

## **Meeting Attendance**

D. Parsons, RISS                      D. Kruchek, CDPHE

## **Discussion**

Based on a review of the Building 903B Pre-Demolition Survey Report (PDSR) by CDPHE, this PDSR is approved and the 903B building demolition can proceed.

K-H received comments on the PDSR from CDPHE and these comments have been resolved to the satisfaction of CDPHE via written responses and PDSR page changes. The official CDPHE PDSR concurrence letter will be provided to DOE and K-H in the near future.

---

**Contact Record Prepared By:** D. Parsons

---

## **Required Distribution:**

J. Legare, DOE	R. Leitner, K-H
C. Deck, K-H	J. Mead, K-H
D. Shelton, K-H	S. Nesta, K-H
C. Gilbreath, K-H	K. North, K-H
S. Gunderson, CDPHE	T. Rehder, USEPA
L. Kilpatrick, K-H	

## **Additional Distribution:**

H. Linsinbigler, K-H  
F. Gibbs, K-H  
D. Kruchek, CDPHE  
G. Morgan, DOE

## ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE REGULATORY CONTACT RECORD

**Date/Time:** September 16, 2004 / 0700

**Site Contact(s):** Steve Nesta  
**Phone:** 303-966-6386

**Regulatory Contact:** David Kruchek and Harlan Ainscough  
**Phone:** 303-692-3328 and 303-692-3337

**Agency:** CDPHE

**Purpose of Contact:** Approval for Closure of the Tanks in the 903B Facility

### Discussion

The CDPHE agrees that the tanks residing in 903B will be closed as ancillary equipment pursuant to the closure of the 903A decontamination pad. The CDD for RCRA Unit 18.01, approved on April 28, 2004, documents procedures for closure of the 903A decontamination pad, and by this contact record the closure of the tanks in 903B. Recent analysis of the rinsate from the 903A pad did not indicate the presence of any metals above the regulatory levels, and volatile organic compounds were non-detect thus allowing for delisting of any EPA waste codes. Additionally, sampling results from the partial closure activities in 1996 for the tanks, pallets, and liners did not detect any metals above regulatory levels, nor any detections for volatile organics. Further, sampling of the 903B tank sediment in 2003 showed no RCRA constituents associated with the tanks. Tank sediment was managed as straight low level waste. Hence, the tanks in 903B have met clean closure under RCRA. Radiological sampling of the tanks in 903B during the pre-demolition survey concluded that the tanks met free release.

**Contact Record Prepared By:** Steve Nesta

### Required Distribution:

M. Aguilar, USEPA  
S. Bell, DOE-RFPO  
B. Birk, DOE-RFPO  
C. Deck, K-H Legal  
D. Foss, K-H 707/776/777  
S. Garcia, USEPA  
C. Gilbreath, K-H 771/774  
S. Gunderson, CDPHE  
J. Legare, DOE-RFPO

R. Leitner, K-H 371/374  
J. Mead, K-H ESS  
G. Morgan, DOE-RFPO  
S. Nesta, K-H RISS  
K. North, K-H ESS/MS  
R. Schassburger, DOE-RFPO  
D. Shelton, K-H ESS  
C. Zahm, K-H Legal

### Additional Distribution:

K. Wiemelt, KH/RISS  
H. Ainscough, CDPHE  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE REGULATORY CONTACT RECORD**

---

**Date/Time:** 6/30/04 – 0700

**Site Contact(s):** Duane Parsons (RISS) – (DAP-024)  
**Phone:** (303) 966-6458

**Regulatory Contact:** David Kruchek, CDPHE  
**Phone:** (303) 692-3328

**Agency:** CDPHE

---

**Purpose of Contact:** Building 903A and 903B Reconnaissance Level Characterization

---

### **Meeting Attendance**

D. Parsons, RISS                      D. Kruchek, CDPHE

### **Discussion**

Buildings 903A and 903B are "anticipated Type 2 RFCA facilities" per the RISS RFCA Facility List. These facilities were used for the decontamination of environmental restoration equipment, such as drilling rigs, field vehicles and sampling equipment. 903A was the high-pressure wash facility, and 903B was the wastewater management facility for 903A.

Contaminates of concern in these facilities are radiological and RCRA/CERCLA contaminants. Based on the age of the facilities (constructed in 1993 and 1995) asbestos should not be present. The facilities do not have a history of beryllium contamination and are not on the List of Known Beryllium Areas. During 903A and 903B operations, only trace amounts of radioactive and RCRA contaminants were identified in the wastewater and sediment.

Based on building use process knowledge and the potential for radiological contamination and/or RCRA/CERCLA constituents, these facilities are assumed to be RFCA Type 2 facilities. Areas having a potential for contamination and needing decontamination have been identified (i.e., process equipment, tanks, piping, and sump pits), and stripout and/or decontamination work is ready to proceed. The RCRA Unit

18.01 associated with 903A and 903B will be closed in accordance with the approved CDD.

Since the areas having a potential for contamination and needing decontamination have already been identified, the Building 903A and 903B Type 2 RLC Report will not be completed. CDPHE concurs that Buildings 903A and 903B are Type 2 RFCA Facilities, and decontamination activities can proceed upon submission and approval of appropriate RSOP notifications. A formal RLC report will not be submitted. A pre-demolition survey and report will be performed and submitted for approval prior to demolition.

There are two small wooden sheds next to the 903A building, which will be released for unrestricted use utilizing the WRE process. These sheds were used to house and store clean support equipment for 903A operations.

---

**Contact Record Prepared By: D. Parsons**

---

**Required Distribution:**

J. Legare, DOE  
C. Deck, K-H  
D. Shelton, K-H  
C. Gilbreath, K-H  
S. Gunderson, CDPHE  
L. Kilpatrick, K-H

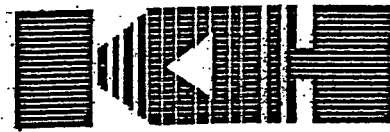
R. Leitner, K-H  
J. Mead, K-H  
S. Nesta, K-H  
K. North, K-H  
T. Rehder, USEPA

**Additional Distribution:**

H. Linsinbigler, K-H  
F. Gibbs, K-H  
D. Kruchek, CDPHE  
G. Morgan, DOE

### Appendix 3

PDSR provided under separate cover.



# **Rocky Flats Environmental Technology Site**

## **PRE-DEMOLITION SURVEY REPORT (PDSR)**

### **BUILDING 903B CLOSURE PROJECT**

**REVISION 0**

**September 2, 2004**

**CLASSIFICATION REVIEW NOT REQUIRED PER  
EXEMPTION NUMBER CEX-005-02**



# STATE OF COLORADO

Bill Owens, Governor  
Douglas H. Benevento, Executive Director

*Dedicated to protecting and improving the health and environment of the people of Colorado*

4300 Cherry Creek Dr. S.  
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Laboratory and Radiation Services Division  
8100 Lowry Blvd.  
Denver, Colorado 80230-6928  
(303) 692-3090



Colorado Department  
of Public Health  
and Environment

September 17, 2004

Mr. Joe Legare  
Director, Project Management Division  
U.S. Department of Energy, Rocky Flats Project Office  
10808 Highway 93, Unit A  
Golden, CO 80403-8200

**RE: Pre-Demolition Survey Report (PDSR) for Building 903B - Approval**

Dear Mr. Legare:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division has reviewed the PDSR for Building 903B, Revision 0 dated September 2, 2004. This PDSR was received on September 10, 2004. Based on the information contained in this PDSR, and modifications to this PDSR provided by Duane Parsons with KH on 9/16/04, we are hereby approving the PDSR as modified for Building 903B.

As stated in this PDSR, although an RLCR was not completed or provided for our concurrence, we previously provided concurrence with the Type 2 determination for B903B as contained in a Contact Record dated 6/30/04.

We also agreed that demolition of B903B may proceed as discussed in a Contact Record dated 9/16/04.

If you have any questions regarding this correspondence please contact me at (303) 692-3367, or David Kruchek at (303) 692-3328.

Sincerely,

Steven H. Gunderson  
RFCA Project Coordinator

cc: Gary Morgan, DOE  
Dave Shelton, KH  
Steve Nesta, KH  
Cameron Freiboth, KH

Karen Wiemelt, KH  
Mark Aguilar, EPA  
Sam Garcia, EPA  
Administrative Records Building T130G

**Appendix 4**  
**RSOP Concurrence**

# STATE OF COLORADO

Bill Owens, Governor  
Douglas H. Benevento, Executive Director

*Dedicated to protecting and improving the health and environment of the people of Colorado*

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Laboratory and Radiation Services Division  
8100 Lowry Blvd.  
Denver, Colorado 80230-6928  
(303) 692-3090



Colorado Department  
of Public Health  
and Environment

September 17, 2004

Mr. Joseph Legare  
Director, Project Management Division  
U.S. Department of Energy, Rocky Flats Project Office  
10808 Highway 93, Unit A  
Golden, CO 80403-8200

**RE: B903B Facility Disposition RSOP Notification**

Dear Mr. Legare:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division has reviewed your September 9, 2004 letter notifying us that the Facility Disposition RSOP will be utilized during the demolition of Building 903B. We hereby agree that B903B may be demolished utilizing the Facility Disposition RSOP.

As indicated in this notification, the building debris, including the slab and tanks, will be appropriately characterized and sent off-site for proper disposal.

If you have any questions regarding this correspondence please contact me at (303) 692-3367 or David Krueck at (303) 692-3328.

Sincerely,

Steven H. Gunderson  
RECA Project Coordinator

cc: Gary Morgan, DOE  
Mark Aguilar, EPA  
Sam Garcia, EPA  
Administrative Records Building T130G

Karen Wiemelt, KH  
Dave Shelton, KH  
Steve Nesta, KH  
Cameron Freiboth, KH

Post-it Fax Note	7871	Date	9/17	Page	2
To	Cameron Freiboth	From	D. Krueck		
On/Dept	KH	Co.	CDPHE		
Phone #	966 2923	Phone #			
Fax #	266 4165	Fax #			

## Appendix 5

### RCRA Unit 18.01 Closure Summary Report B903A Main Decontamination Facility

## **PURPOSE**

This Summary Report pertains to RCRA closure activities for the RCRA Interim Status Unit 18.01 – Remedial Action Decontamination Pad, and is a requirement of Section 1.1 of the Closure Description Document (CDD) for this RCRA Unit (04-RF-00113). This report contains a description of major closure activities and any deviations from those stated in the CDD and other relevant information.

## **DESCRIPTION OF MAJOR CLOSURE ACTIVITIES**

Closure activities were conducted under IWCP Work Packages T0111830-17 and T0112587. All of the secondary containment and curtains were sprayed with a water/detergent mix. The water was vacuumed and collected. After this a rinse of the curtains and secondary containment was conducted. Based on the rinsate results for chromium, the slab did not meet clean closure, but was below characteristic hazardous levels for chromium. Therefore, the slab was disposed as non-routine sanitary waste. All of the curtains were disassembled, size reduced, and efficiently packaged into 2 drums for disposal as hazardous waste at Kettleman Hills Landfill, CA. The 903A concrete pad and all of the tanks from Building 903B (see contact record dated 9/16/04) were removed and managed as sanitary waste. There were no unanticipated circumstances or events to cause a deviation from the descriptions in the CDD.

The liquid generated was collected in drums and based on analytical results will be disposed of at either B891 or through the Aqueous Waste Treatment System.

The under side of the concrete was surveyed and no radiological contamination was found. Therefore, no additional soil sampling below the pad of RCRA unit 18.01 is required.

## **SUMMARY**

The requirements stated in the CDD have been fulfilled.